Productize Technologies
A Computer Vision Based Software Development Company

Intern Hiring Assignment - Basic

Tasks:

1. Create an anaconda environment for this assignment. Export yml file at the end of the assignment.
   Output file name: environment.yml

2. Draw rect, circle and line on a white image using OpenCV. White image has to be created using numpy. Any height & width.
   Output file name: result1.png

3. Folder "input1" contains images of physical boxes with transparent backgrounds. Convert the transparent background to black color without affecting the physical boxes.
   Output file names should be : result2.png & result3.png

4. Folder "Task 4" consists of an instruction PDF. Follow the instructions and develop a script to output the required result. Output of Example.csv are 2 images, 1.png & 2.png. You have to run the algorithm on Test.csv and name them result4.png, result5.png, & result6.png.
   Output file names: result4.png, result5.png, & result6.png

   ## BONUS

5. Folder "input2" contains images of cigarettes, you have to design a system to count the number of cigarettes in the box. Hint :- Any approach is fine, Hint's are given for the best approach. You can solve it using your own approach

a. Try getting the HSV value of cigarettes (Feel free to ask HSV values if you can't find them)
   b. Mask
   c. Contour detection

Output of task 5 should be a folder that consists of contour markings on the images along with the binary masks if any. There's no specific format of the output for this task, but do your best to showcase your talent

You have to submit the link of the google drive where all the results are uploaded (Marked in yellow) along with the python scripts. Please check that the google drive permission of the link is "Anyone with the link is a viewer", without this, your assignment won't be considered.

All the best!